

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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TITLE: DEVICE FOR FIXING THE FRONT END ASSEMBLY OF A MOTORCYCLE WITH  
CASTER ANGLE AND ADJUSTABLE GROUND CASTER ANGLE

Preliminary Amendment: CLAIM AMENDMENTS

1. (Currently amended) Device for fixing ~~the~~ a front end assembly of a motorcycle, said  
device comprising:

an upper plate (~~33, 43, 73~~), a lower plate (~~34, 44, 64~~), a column shaft (~~37, 47, 67~~)  
connecting the lower plate (~~34, 44, 64~~) and the upper plate (~~33, 43, 73~~) by going through ~~the~~ a  
column tube (~~5~~) of ~~the~~ a chassis,

~~characterized in that~~ further comprising: a guide part (~~14~~) and a swivel joint element  
(~~12~~) ~~are~~ placed respectively or inversely in ~~the~~ upper and lower receptacles of ~~the~~ guide elements  
(~~6a~~) and (~~6b~~) of the column tube (~~5~~) and ~~are usually~~ placed by ~~the motorcycle~~ manufacturers in order  
to allow ~~the~~ rotation of the front end assembly, the two elements (~~14~~) and (~~12~~) being passed through  
by the column shaft (~~37, 47, 67~~), the rotating elements (~~11, 411~~) and (~~16, 416, 716~~) being placed  
respectively in the lower plate (~~34, 44, 64~~) and upper plate (~~33, 43, 73~~) in order to permit ~~the~~ rotation  
of these plates on the column shaft (~~37, 47, 67~~) ~~which is~~, immobilized ~~for them~~ in rotation relative  
to the tube (~~5~~), and

a part (~~15~~) ~~capable of~~ sliding on the guide part (~~14~~) while holding the axle (~~37, 47,~~  
~~67~~) which goes through it said guide part, being placed between the guide part (~~14~~) and the upper

plate (33, 43, 73), ~~the an assembly of the fixing device thereof~~ of the front end assembly ~~formed by~~ the being comprised of two equipped plates (33, 43, 73; 34, 44, 64), the part (15), and the column shaft (37, 47, 67) is being able to tilt by sliding of the part (15) holding the axle (37, 47, 67), on the part (14) united with the tube (5) and which guides guiding the axle (37, 47, 67) in this movement in the a median plane of the motorcycle and around the axis of rotation (30) which is perpendicular to the median plane of the motorcycle and goes through the a bearing center of the swivel joint element (12).

2. (Currently amended) Device according to claim 1, ~~characterized in that the~~ wherein said upper surface (20) of the guide part (14) and the lower surface (21) of the part (15) are cylindrical surfaces of the axis (30) perpendicular to the median plane of the motorcycle and going through the center of rotation of the swivel joint element (12).

3. (Currently amended) Device according to claim 1, ~~characterized in that~~ further comprising a groove having parallel sides (18a) and (18b) ~~is made in the guide part (14) in a manner~~ so that the axle of this groove is contained in the median plane of the motorcycle and that the column shaft (37, 47, 67) ~~can slide~~ is slidable without play along this said groove by, ~~for example, the an~~ intermediary of the two flat surfaces (19a) and (19b) ~~made on the shaft (37, 47, 67).~~

4. (Currently amended) Device according to claim 1, ~~characterized in that~~ further comprising an element (13, 613a, 613b) ~~prevents the preventing~~ rotation of the guide part (14) relative to the tube (5).

5. (Currently amended) Device according to ~~claims 1 to 4,~~ Claim 1, further comprising a nut (23), positioned at either of the two ends of the column shaft (37, 47, 67), the second end having a stop, ~~makes it possible to lock the~~ locking a position of the shaft (37, 47,

67) at the desired angular value (E) while ~~causing the~~ adhesion of the cylindrical surface (21) of the part (15) on the cylindrical surface (20) of the guide part (14) by the pressure created by the compression of the parts (22, 722; 16, 416, 716; 15; 14; 5; 12; 24, 724; 11, 411) between this said nut (23) and the stop of the axle (37, 47, 67).

6. (Currently amended) Device according to claim 5, ~~characterized in that~~ further comprising, on the cylindrical surface (21) of the part (15), small grooves ~~are made~~ over the lines parallel to the axis (30) of the surface (21), ~~which engage~~ engageable perfectly with the combined grooves made on the surface (20) of the guide part (14), thus ~~allowing~~ an angular adjustment of the axle (37, 47, 67) relative to the tube (5) by steps of value (a) and a locking into position by positive locking.

7. (Currently amended) Device according to ~~any one of the claims 5 and 6, characterized in that~~ Claim 5, further comprising two opposing threaded holes having an axis contained in the median plane of the motorcycle ~~are made~~ through the guide part (14) ~~and/or the tube (5) thus or both,~~ allowing two screws (613a) ~~and (613b)~~ to adjust and lock the angular position (E) of the column shaft (37, 47, 67) relative to the tube axis (5).

8. (Currently amended) Device according to claim 1, ~~characterized in that~~ wherein the rotating element (416) is fixed by a part (25) on the upper plate (43) in a receptacle having an oblong shape (28a), with an axis contained in the median plane of the motorcycle, able to allow sliding without play and to allow the positioning of the rotating element (416) using adjustment screws (27a) ~~and (27b)~~ in order to modify the offset (B) on the upper plate (43) to a value (B') between (B-e) and (B+e).

9. (Currently amended) Device according to claim 1, ~~characterized in that~~ wherein the rotating element (411) is fixed by a part (35) on the lower plate (64) in a receptacle having an oblong

shape ~~(29a)~~, with an axis contained in the median plane of the motorcycle, enabling the rotating element ~~(411)~~ to be slid without play and enabling its positioning thereof using the adjustment screws ~~(36a) and (36b)~~ in order to modify the offset (B) on the lower plate ~~(64)~~ to a value (B") between (B-f) and (B+f).

10. (Currently amended) Device according to ~~any one of the claims 8 and 9~~, characterized ~~in that the Claim 8, wherein~~ rotating elements ~~(416) and (411)~~ respectively placed in the upper plate ~~(43)~~ and lower plate ~~(44, 64)~~ have a freedom of bearing rotation around the respective axes ~~(32) and (31)~~, ~~capable of allowing the swinging of the upper plate (43) and lower plate (44, 64) around these axes (32) and (31).~~